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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Svend Frolund et al.

Art Unit:

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Serial No.:

10/037,107

§ §

Examiner:

Van H. Nguyen

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8

For:

System for Customizing

§ Atty. Dkt. No.:

10006790-1

On-Line Computer Services

§

(HPC.0244US)

# Mail Stop Appeal Brief-Patents

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# SUPPLEMENTAL APPEAL BRIEF PURSUANT TO 37 C.F.R § 41.37

Sir:

The final rejection of claims 1-15, 18-23, and 26-28 is hereby appealed.

# I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Co., L.P.

#### II. RELATED APPEALS AND INTERFERENCES

None.

#### III. STATUS OF THE CLAIMS

Claims 1-15, 18-23, and 26-28 have been finally rejected and are the subject of this appeal. Claims 16, 17, 24, and 25 have been cancelled.

1 hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent Office (Fux No. (571) 273-8300) on the

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#### IV. STATUS OF AMENDMENTS

No amendment after final rejection has been submitted.

# V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

Independent claim 1 recites a computer system that has an application, a sub-system for having an interaction with the application, and an interceptor system that includes a proxy, a customization module, and a dispatcher. The customization module provides a customization and has an interaction with the proxy, and the dispatcher has an interaction with the customization module and has an interaction with the sub-system. The computer system further includes a customization repository for containing the customization module, and a service having an interaction with the customization repository. Moreover, the computer system has a client having an interaction with the service, and a control that has an interaction with the customization repository and the service for causing customization of the service and the client. Moreover, the customization repository is to store an additional customization module providing another customization, where the control is to add the additional customization module to the interceptor system while the application is running. The corresponding reference to the

Specification and drawings for each element of claim 1 is provided below. The computer system of claim 1 comprises:

an application (Fig. 2:10);

a sub-system (Fig. 2:12) for having an interaction with the application;

an interceptor system (Fig. 2:20) including:

- a proxy (Fig. 2:22) having an interaction with the application (Spec., 5:12-13),
- a customization module (Fig. 2:26-1 to 26-n) providing a customization and having an interaction with the proxy (Spec., 5:20-23; 5:28-6:21; 7:3-9), and
- a dispatcher (Fig. 2:30) having an interaction with the customization module and having an interaction with the sub-system (Spec., 6:22-7:2);
- a customization repository (Fig. 3:42) for containing the customization module (Spec., 7:12-23);
- a service (Fig. 3:54) having an interaction with the customization repository (Spec., 7:29-31);
- a client (Fig. 3:56-1 to 56-n) having an interaction with the service (Spec., 7:31-33); and
- a control (Fig. 2:23; Fig. 3:52) having an interaction with the customization repository and the service for causing customization of the service and the client by disposing the proxy of the interceptor system to interact with the application and the dispatcher of the interceptor system to interact with the sub-system (Spec., 5:9-11, 20-21; 7:5-6, 23-33),
- the customization repository to store an additional customization module providing another customization, the control to add the additional customization module to the interceptor system while the application is running (Spec., 5:20-27).

Independent claim 9 recites a computer system that has an application, a sub-system for having an interaction with the application, and an interceptor system between the application and the sub-system that includes a customization module, a proxy, a first customization module for providing a first customization for a first non-functional property, and a dispatcher. Moreover, the computer system has a customization repository for containing a second customization module providing a second customization for a second non-functional property. The customization control is to add the second customization module to the interceptor system while the application is running. Reference to the Specification and drawings is provided for the elements of claim 9 below. The computer system of claim 9 comprises:

an application (Fig. 2:10);

- a sub-system (Fig. 2:12) for having an interaction with the application;
- an interceptor system (Fig. 2:20) between the application and the sub-system including:
  - a customization control (Fig. 2:23; Fig. 3:52);
  - a proxy (Fig. 2:22) having an interaction with the application (Spec., 5:12-13).
  - a first customization module (Fig. 2:26-1 to 26-n) providing a first customization for a first non-functional property of the computer system and having an interaction with the proxy (Spec., 5:20-23; 5:28-6:21; 7:3-9), and
  - a dispatcher (Fig. 2:30) having an interaction with the first customization module and having an interaction with the sub-system (Spec., 6:22-7:2);
- a customization repository (Fig. 3:42) for containing a second customization module providing a second customization for a second non-functional property (Spec., 5:20-23; 5:28-6:21; 7:3-9),
- the customization control to add the second customization module to the interceptor system while the application is running (Spec., 5:20-27).

Independent claim 10 recites a computer system having an application, a plurality of sub-systems for having an interaction with the application, and an interceptor system that includes a customization control, a proxy, a plurality of customization modules providing customizations for a plurality of non-functional properties of the computer system, and a dispatcher. Moreover, the computer system has a customization repository for containing the customization modules. The customization control is to install at least one of the customization modules to the interceptor system while the application is running. Reference to the Specification and drawings for elements of claim 10 are provided below. The computer system of claim 10 comprises:

an application (Fig. 2:10);

a plurality of sub-systems (Fig. 2:12) for having an interaction with the application;

an interceptor system (Fig. 2:20) including:

- a customization control (Fig. 2:23; Fig. 3:52);
- a proxy (Fig. 2:22) having an interaction with the application (Spec., 5:12-13).
- a plurality of customization modules (Fig. 2:26-1 to 26-n) providing customizations for a plurality of non-functional properties of the computer system and having an interaction with the proxy as controlled by the customization control (Spec., 5:20-23; 5:28-6:21; 7:3-9), and
- a dispatcher (Fig. 2:30) having a selectable interaction with the plurality of customization modules and having an interaction with the plurality of sub-systems (Spec., 6:22-7:2);
- a customization repository (Fig. 3:42) for containing the customization modules (Spec., 5:20-23; 5:28-6:21; 7:3-9),
- the customization control to install at least one of the customization modules to the interceptor system while the application is running (Spec., 5:20-27).

Independent claim 11 recites a software system stored on at least a computer-usable storage medium and executable in a computer system, where the software system includes an application, a sub-system to interact with the application, an interceptor system between the application and the sub-system, where the interceptor system has a proxy, a first customization module providing a first customization, a dispatcher to interact with the customization module, and with the sub-system, and a second customization module providing a second customization. The interceptor system enables addition of the second customization module to the interceptor system while the application is running. Reference to the Specification and drawings for elements of claim 11 are provided below. The software system of claim 11 comprises:

an application (Fig. 2:10);

- a sub-system (Fig. 2:12) to interact with the application; and
- an interceptor system (Fig. 2:20) between the application and sub-system, including:
  - a proxy (Fig. 2:22) to interact with the application (Spec., 5:12-13);
  - a first customization module (Fig. 2:26-1 to 26-n) providing a first customization, the first customization module to interact with the proxy (Spec., 5:20-23; 5:28-6:21; 7:3-9);
  - a dispatcher (Fig. 2:30) to interact with the customization module and with the sub-system (Spec., 6:22-7:2); and
  - a second customization module (Fig. 2:26-1 to 26-n) providing a second customization, the second customization module to interact with the proxy and the dispatcher (Spec., 5:20-23; 5:28-6:21; 7:3-9),
  - the interceptor system to enable addition of the second customization module to the interceptor system while the application is running (Spec., 5:20-27).

Independent claim 19 recites a software system stored on at least a computer-usable storage medium and executable in a computer system, the software system including an application, a sub-system for having an interaction with the application, and an interceptor system including a proxy having an interaction with the application and including a customization control, a customization module to perform a non-functional operation of the software system, the non-functional operation comprising a failover operation, and where the customization control is to control interaction with the customization module with the proxy. The interceptor system further has a dispatcher. The customization control can add another customization module to the interceptor system while the application is running, where the another customization module is to perform an additional non-functional operation. Reference to the Specification and drawings for elements of claim 19 are provided below. The software system of claim 19 comprises:

an application (Fig. 2:10);

- a sub-system (Fig. 2:12) for having an interaction with the application; and an interceptor system (Fig. 2:20) including:
  - a proxy (Fig. 2:22) having an interaction with the application and including a customization control (Fig. 2:23; Fig. 3:52, Spec., 5:20-23; 7:23-33);
  - a customization module (Fig. 2:26-1 to 26-n) to perform a non-functional operation of the software system and having an interaction with the proxy, the non-functional operation comprising a failover operation (Spec., 5:20-23; 5:28-6:21; 7:3-9),
  - the customization control to control interaction of the customization module with the proxy (Spec., 5:20-23; 7:23-33); and
  - a dispatcher (Fig. 2:30) having an interaction with the customization module and having an interaction with the sub-system (Spec., 6:22-7:2),

wherein the customization control adds another customization module to the interceptor system while the application is running, the another customization module to perform an additional non-functional operation (Spec., 5:20-27; 7:3-9).

Independent claim 20 recites a software system stored on at least a computer-usable storage medium and executable in a computer system, the software system including an application, a plurality of sub-systems for having an interaction with the application, and an interceptor system that has a proxy having an interaction with the application and including a customization control, and a plurality of customization modules providing customizations for a plurality of non-functional properties of the software system. The interceptor system further includes a dispatcher and a customization control to add at least one of the customization modules to the interceptor system while the application is running. Reference to the Specification and drawings for elements of claim 20 are provided below. The software system of claim 20 comprises:

an application (Fig. 2:10);

a plurality of sub-systems (Fig. 2:12) for having an interaction with the application; and

an interceptor system (Fig. 2:20) including:

- a proxy (Fig. 2:22) having an interaction with the application and including a customization control (Spec., 5:12-13);
- a plurality of customization modules (Fig. 2:26-1 to 26-n) providing customizations for a plurality of non-functional properties of the software system and having an interaction with the proxy, the non-functional properties comprising at least failure masking and performance measurement (Spec., 5:20-23; 5:28-6:21; 7:3-9);
- a dispatcher (Fig. 2:30) having a selectable interaction with the plurality of customization modules and having an interaction with the plurality of sub-systems (Spec., 6:22-7:2); and

a customization control (Fig. 2:23; Fig. 3:52) to add at least one of the customization modules to the interceptor system while the application is running (Spec., 5:20-27).

#### VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-15, 18-23, And 26-28 Rejected Under 35 U.S.C. § 103 Over U.S. Patent No. 6,615,258 (Barry) In View Of U.S. Patent No. 5,710,884 (Dedrick).

#### VII. ARGUMENT

The claims do not stand or fall together. Instead, Appellant presents separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-headings as required by 37 C.F.R. § 41.37(c)(1)(vii).

A. Claims 1-15, 18-23, And 26-28 Rejected Under 35 U.S.C. § 103 Over U.S. Patent No. 6,615,258 (Barry) In View Of U.S. Patent No. 5,710,884 (Dedrick).

#### 1. Claims 1-8.

The Examiner has failed to establish a *prima facie* of obviousness with respect to claim 1 over Barry and Dedrick, for at least the following reasons: (1) no motivation or suggestion existed to combine the reference teachings; and (2) the references when combined do not teach or suggest all elements of the claim. *See* M.P.E.P. § 2143 (8<sup>th</sup> ed., Rev. 5), at 2100-126.

Point (2) is addressed first. As conceded by the Examiner, Barry fails to teach a control to add the additional customization module to the interceptor system while the application is running. 9/21/2006 Office Action at 3. Instead, the Examiner relied upon Dedrick as disclosing this claim element. *Id.* The Examiner cited mainly to Fig. 10 of Barry as disclosing the various elements of the interceptor system recited in claim 1. 9/21/2006 Office Action at 2-3. The

Examiner also referred to various passages in column 21 of Barry that discusses the Fig. 10 arrangement of Barry.

Fig. 10 of Barry discloses a client GUI application front end, including a report requester 212, a report viewer 215, an inbox client 210, and an order entry client 280. Also, Fig. 10 of Barry discloses a middle tier that includes a report manager 250, report scheduler 260, inbox server 270, order entry server 39, and dispatcher 26. The customization modules recited in claim 1 were considered by the Examiner to be disclosed by the "application proxy components" referred to at line 26 of column 21 of Barry. The application proxy components of Barry include a report manager proxy 250' in the report manager 250 (Barry, 22:5), an inbox proxy 270' in the inbox server 270 (Barry, 28:50), and a report scheduler proxy 260' in the report scheduler 260.1

As correctly noted by the Examiner, Barry fails to disclose a customization control to add an additional customization module to the interceptor system while the application is running. However, the Examiner erred in stating that claim 1 would be obvious over Barry and Dedrick.

Dedrick does not provide any teaching or suggestion of adding an additional customization module to an interceptor system while the application is running. Dedrick describes communicating electronic content, such as advertisement content, newspaper content, magazine content, or encyclopedia content (see Dedrick, 9:47-52), from publishers/advertisers 18 to clients 12 (see Dedrick, Fig. 1). The client 12 of Dedrick includes a session manager 29 to transfer data and control information to and from the client. Dedrick, 5:39-42. The client 12 also includes a content adapter 25 to customize electronic content (e.g., advertisements, newspaper/magazine articles, encyclopedia entries) based on a user profile, such as to change a color of the electronic content based on a user's color preferences, or to change the electronic

content between audio format and video format based on the user's consumption preference.

Dedrick, 7:15-27.

Modifying information content by the content adapter 25 of Dedrick is completely different from adding an additional customization module to an interceptor system, as recited in claim 1. Therefore, it is respectfully submitted that, since neither Dedrick nor Barry (alone or in combination) teaches or suggests each and every element of claim 1, a *prima facie* case of obviousness has not been established for at least this reason.

A further defect in the obviousness rejection is the identification of database 258 in Barry as being the customization repository of claim 1, which customization repository stores customization modules. The database 258 of Barry provides accounting of metadata and user report inventory - - there is no suggestion anywhere that this database 258 stores customization modules as recited in claim 1. This is a further reason that the hypothetical combination of Barry and Dedrick does not teach or suggest all elements of claim 1.

In the Response to Arguments section of the 9/21/2006 Office Action, the Examiner provided a general response that pending claims are to be given their broadest reasonable interpretation during patent examination, and that "the proxy and customization recitations" used in the claims have "broad meaning in the art, and thus would require[] a broad interpretation of the claims in determining patentability of the disclosed invention." 9/21/2006 Office Action at 6. The Examiner then made the following comment:

The fact that Applicant has not narrowed the definition/scope of the current claims implies that the Applicant intends an extensive coverage [sic] breadth of the claims, which is clearly met by the prior art of Barry and Dedrick.

Id.

<sup>&</sup>lt;sup>1</sup> The Examiner also stated that these proxies disclosed in Fig. 10 of Barry constituted the proxy recited in claim 1. See 9/21/2006 Office Action at 3-4. Therefore, there appears to be an inconsistency in application of Barry to the

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The case law cited by the Examiner clearly sets forth that the interpretation of claim terms must be reasonable. Appellant has provided a detailed analysis of why the hypothetical combination of Barry and Dedrick does not satisfy the elements of claim 1. Relying on the allegation that the claim terms have "broad meaning in the art" does not change the fact that Barry and Dedrick clearly fail to teach or suggest all elements of the claimed invention.

By being unable to effectively rebut Appellant's specific points regarding Barry and Dedrick, and instead relying on a general allegation that the claim terms are broad, it is clear that a *prima facie* case of obviousness *cannot* be established with respect to the claimed subject matter.

Another defect of the obviousness rejection is that no motivation or suggestion existed to combine Barry and Dedrick. Barry relates to a data management system in which a user can request, specify, customize, and schedule delivery of reports pertaining to a customer's data, such as reports relating to details regarding calls, data relating to call routing, network management data, trouble ticket information, and fault alarms. Barry, 3:42-50; 2:5-22. Dedrick, on the other hand, relates to modifying actual electronic content, such as advertisements, newspaper/magazine articles, and encyclopedia entries, tailored to a user's preferences. A person skilled in the art would not have been motivated to combine the disparate teachings of Barry and Dedrick. See In re Fritch, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992) ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.").

<sup>&</sup>quot;proxy" and "customization module" elements recited in claim 1.

In response to Appellant's arguments that no motivation or suggestion existed to combine the teachings of Barry and Dedrick, the Examiner cited various case law for various standards regarding when it is proper to combine the teachings of references. Then, the Examiner concluded that "[t]he customized proxy transactions, in the manner recited in the pending claims does not constitute a non obvious improvement over the prior art." 9/21/2006 Office Action at 7. This argument does not adequately rebut Appellant's analysis regarding why a person of ordinary skill in the art would not have been motivated to combine the teachings of Barry and Dedrick. As noted above, Barry and Dedrick are related to completely different subject matter, and the Examiner has failed to cite to any objective evidence that would have indicated that a person of ordinary skill in the art would have been motivated to combine the teachings of Barry and Dedrick.

On page 3 of the Office Action, the Examiner made the following assertion regarding why it would be obvious to combine Barry and Dedrick:

It would have been obvious to combine Dedrick's teachings with Barry because the 'updating of user profile data is transparent', col. 4 lines 14-23 and contemporaneous with each individual's use of the system, thereby facilitating optimal adaptive flexability [sic] so that each service most effectively suits the users attributes.

Id.

The update of profile data noted to be in column 4, lines 14-23, of Dedrick by the Office Action has nothing to do with the teachings of Barry. As noted above, Barry relates to a data management system in which a user can request, specify, customize, and schedule delivery of reports pertaining to a customer's data. There existed absolutely no suggestion, whether implicit or explicit, of incorporating the profile editor feature in the column 4, lines 14-23, passage of Dedrick cited by the Examiner into the system of Barry.

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The Examiner's combination of disparate claim elements from Barry and Dedrick is based entirely on impermissible hindsight. See In re Fritch, 23 U.S.P.Q.2d at 1784 ("It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious."). In view of the foregoing, it is clear that a prima facie case of obviousness has not been established for at least this additional reason.

In view of the foregoing, reversal of the final rejection of the above claims is respectfully requested.

# 2. Claims 9, 10, 19, 20, and 26-28.

Claim 9 was also rejected as being obvious over Barry and Dedrick. In the rejection of claim 9, the Examiner referred to the discussion of claim 1, and noted that the "limitations in claim 9 are functionally equivalent to the claim 1 limitations ...." 9/21/2006 Office Action at 5.

It is unclear what the Examiner meant by saying that the limitations in claim 9 "are functionally equivalent" to those of claim 1. It is noted that claim 9 has fewer elements than claim 1. Thus, to the extent that the Examiner is stating that claim 9 includes limitations that are not expressly recited, Appellant respectfully submits that would be improper.

Claim 9 recites a computer system that has an application, a sub-system, an interceptor system having a customization control, a proxy, a first customization module, and a dispatcher. The computer system of claim 9 also includes a customization repository for containing a second customization module, where the customization control can add the second customization module to the interceptor system while the application is running.

As discussed above, the Examiner has conceded that Barry fails to disclose a customization control that can add a customization module to the interceptor system while the application is running. Instead, the Examiner cited Dedrick as disclosing such a feature. However, for reasons similar to those given above, a *prima facie* case of obviousness has not been established with respect to claim 9 (and its dependent claims) for at least the following reasons: no motivation or suggestion existed to combine the teachings of Barry and Dedrick; and the hypothetical combination of Barry and Dedrick fails to teach or suggest all elements of claim 9.

Independent claims 10, 19, and 20 are similarly allowable over Barry and Dedrick.

Therefore, reversal of the final rejection of the above claims is respectfully requested.

### 3. Claims 11-15, 18, 22, and 23.

Independent claim 11 was also rejected as being obvious over Barry and Dedrick. Claim 11 recites a software system that has an application, a sub-system, and an interceptor system that has a proxy, a first customization module, a dispatcher, and a second customization module. Moreover, claim 11 recites an interceptor system that enables the addition of the second customization module to the interceptor system while the application is running.

The Examiner rejected claim 11 as being "functionally equivalent" to claim 10. 9/21/2006 Office Action at 5. Note, however, that the language of claim 11 differs from claim 10, and thus should not be dismissed as being just "functionally equivalent." However, based on the rejection of the above claims, it is apparent that the Examiner is conceding that Barry does not disclose an interceptor system that enables addition of the second customization module to the interceptor system while the application is running. Rather, the Examiner has relied upon Dedrick as disclosing this feature.

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However, for reasons similar to those given above, a prima fucie case of obviousness has not been established with respect to claim 11 for at least the following reasons: no motivation or suggestion existed to combine the teachings of Barry and Dedrick; and the hypothetical combination of Barry and Dedrick does not teach or suggest all elements of claim 11.

For the foregoing reasons, reversal of the final rejection of the above claims is respectfully requested.

#### 4. Claim 21.

Claim 21 depends from claim 11, and is thus allowable for at least the same reasons as claim 11. Moreover, claim 21 recites that the interceptor system is to enable removal of the first customization module while the application is running. The Examiner cited column 12, lines 35-66, of Dedrick as disclosing this feature. The cited passage of Dedrick refers to a publisher/advertiser that can request that a unit of information be directed only to male users. The cited passage of Dedrick also states that the publisher/advertiser can be provided with an account number so that charges associated with consumption of information is charged to the account number. Dedrick further mentions that a charge incurred by the user can be debited against a user's account and credited to the publisher's account. The cited passage also refers to a metering server 14 that includes a smart electronic information transport router to provide high bandwidth electronic information communication.

Nowhere in the cited passage of Dedrick is there any mention or suggestion of an interceptor system that enables removal of a first customization module while the application is running. Therefore, the obviousness rejection of claim 21 is defective for this additional reason.

For the foregoing reason, reversal of the final rejection of the above claim is respectfully requested.

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#### VIII. CONCLUSION

In view of the foregoing, reversal of all final rejections and allowance of all pending claims is respectfully requested.

Respectfully submitted,

Date: Jul 26, 200

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## APPENDIX OF APPEALED CLAIMS

The claims on appeal are:

1	1. A computer system comprising:			
2	an application;			
3	a sub-system for having an interaction with the application;			
4	an interceptor system including:			
5	a proxy having an interaction with the application,			
6	a customization module providing a customization and having an interaction with			
7 .	the proxy, and			
8	a dispatcher having an interaction with the customization module and having an			
9	interaction with the sub-system;			
10	a customization repository for containing the customization module;			
11	a service having an interaction with the customization repository;			
12	a client having an interaction with the service; and			
13	a control having an interaction with the customization repository and the service for			
14	causing customization of the service and the client by disposing the proxy of the			
15	interceptor system to interact with the application and the dispatcher of the			
16	interceptor system to interact with the sub-system.			
17	the customization repository to store an additional customization module providing			
18	another customization, the control to add the additional customization module to			
19	the interceptor system while the application is running.			
1	2. The computer system as claimed in claim 1 wherein:			
2	the client has an interaction with the customization repository, the client responsive to the			
3	control through the service for causing customization of the service and the client			
4	by disposing the proxy of the interceptor system to interact with the application			
5	and the dispatcher of the interceptor system to interact with the sub-system.			
_	and the dispatcher of the interceptor system to interact with the sub-system.			

1 3. The computer system as claimed in claim 1 including: 2 a customization developer system having an interaction with the customization repository 3 for providing customizations thereto while the service is interacting with the client. 1 4. The computer system as claimed in claim 1, wherein each of the customization 2 modules has a different customization; 3 and wherein: 4 the proxy includes a customization control for controlling the interaction of the 5 customization modules with the proxy. 1 5. The computer system as claimed in claim 1 including: 2 a plurality of sub-systems; 3 wherein each of the plurality of sub-systems has a different function; and 4 a customization control for controlling the interaction of the plurality of sub-systems with 5 the dispatcher. 1 6. The computer system as claimed in claim 1 wherein: 2 the service includes a customization deployment interface for interacting with the control 3 to cause a group including the service and the client to obtain a customization. 7. 1 The computer system as claimed in claim 1 wherein: 2 each customization module is for customization of a non-functional property of the 3 computer system. 1 8. The computer system as claimed in claim 1 wherein: 2 each customization module is selected from a group consisting of performance related, 3 security related, and failure related modules.

1	9. A computer system comprising:		
2	an application;		
3	a sub-system for having an interaction with the application;		
4 ·	an interceptor system between the application and the sub-system including:		
5	a customization control;		
6	a proxy having an interaction with the application,		
7	a first customization module providing a first customization for a first		
8	non-functional property of the computer system and having an interaction		
9	with the proxy, and		
10	a dispatcher having an interaction with the first customization module and having		
11	an interaction with the sub-system;		
12	a customization repository for containing a second customization module providing a		
13	second customization for a second non-functional property,		
14	the customization control to add the second customization module to the interceptor		
15	system while the application is running.		
1	10. A computer system comprising:		
2	an application;		
3	a plurality of sub-systems for having an interaction with the application;		
4	an interceptor system including:		
5	a customization control;		
6	a proxy having an interaction with the application,		
7	a plurality of customization modules providing customizations for a plurality of		
8	non-functional properties of the computer system and having an		
9	interaction with the proxy as controlled by the customization control, and		
10	a dispatcher having a selectable interaction with the plurality of customization		
11	modules and having an interaction with the plurality of sub-systems;		
12	a customization repository for containing the customization modules,		
13	the customization control to install at least one of the customization modules to the		
14	interceptor system while the application is running.		

A software system stored on at least a computer-usable storage medium and				
executable in a computer system, the software system comprising:				
an application;				
a sub-system to interact with the application; and				
an interceptor system between the application and sub-system, including:				
a proxy to interact with the application;				
a first customization module providing a first customization, the first				
customization module to interact with the proxy;				
a dispatcher to interact with the customization module and with the sub-system				
and .				
a second customization module providing a second customization, the second				
customization module to interact with the proxy and the dispatcher,				
the interceptor system to enable addition of the second customization module				
the interceptor system while the application is running.				
12. The software system as claimed in claim 11 including:				
a control for causing the proxy of the interceptor system to interact with the application				
a control for causing the proxy of the interceptor system to interact with the application				
a control for causing the proxy of the interceptor system to interact with the application and the dispatcher of the interceptor system to interact with the sub-system.				
and the dispatcher of the interceptor system to interact with the sub-system.  13. The software system as claimed in claim 11 including:				
and the dispatcher of the interceptor system to interact with the sub-system.				
and the dispatcher of the interceptor system to interact with the sub-system.  13. The software system as claimed in claim 11 including: a customization developer system for developing additional customization modules; and a customization repository to store the additional customization modules,				
and the dispatcher of the interceptor system to interact with the sub-system.  13. The software system as claimed in claim 11 including: a customization developer system for developing additional customization modules; and a customization repository to store the additional customization modules,				
and the dispatcher of the interceptor system to interact with the sub-system.  13. The software system as claimed in claim 11 including: a customization developer system for developing additional customization modules; and a customization repository to store the additional customization modules, the additional customization modules in the customization repository to be communicated.				
and the dispatcher of the interceptor system to interact with the sub-system.  13. The software system as claimed in claim 11 including: a customization developer system for developing additional customization modules; and a customization repository to store the additional customization modules, the additional customization modules in the customization repository to be communicated to the interceptor system over a link.				

1	12.	The software system as claimed in claim 11 including.		
2	a plurality of sub-systems; and			
3	a customization control for controlling the interaction of the purality of sub-systems with			
4		the dispatcher connected to a group including the application, the proxy, and the		
5		dispatcher.		
1	18.	The software system as claimed in claim 11 wherein:		
2	the customization modules are selected from a group consisting of performance related			
3		security related, and failure related modules.		
1	19.	A software system stored on at least a computer-usable storage medium and		
2	executable in a computer system, the software system comprising:			
3	an application;			
4	a sub-system for having an interaction with the application; and			
5	an interceptor system including:			
6	•	a proxy having an interaction with the application and including a customization		
7		control;		
8		a customization module to perform a non-functional operation of the software		
9		system and having an interaction with the proxy, the non-functional		
10		operation comprising a failover operation,		
11		the customization control to control interaction of the customization module with		
12		the proxy; and		
13	a dispatcher having an interaction with the customization module and having an			
14		interaction with the sub-system,		
15		wherein the customization control adds another customization module to the		
16		interceptor system while the application is running, the another		
17		· customization module to perform an additional non-functional operation.		

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interface to the dispatcher.

- l 20. A software system stored on at least a computer-usable storage medium and 2 executable in a computer system, the software system comprising: 3 an application; 4 a plurality of sub-systems for having an interaction with the application; and 5 an interceptor system including: 6 a proxy having an interaction with the application and including a customization 7 control; a plurality of customization modules providing customizations for a plurality of 9 non-functional properties of the software system and having an interaction 10 with the proxy, the non-functional properties comprising at least failure 11 masking and performance measurement; 12 a dispatcher having a selectable interaction with the plurality of customization 13 modules and having an interaction with the plurality of sub-systems; and 14 a customization control to add at least one of the customization modules to the 15 interceptor system while the application is running. 1 21. The software system of claim 11, the interceptor system to enable removal of the 2 first customization module while the application is running. 1 22. The software system of claim 11, wherein the customization provided by the first 2 customization module comprises at least one of performance measurement and failure masking.
- 1 26. The computer system of claim 9, wherein the first non-functional property comprises failover control.

The software system of claim 11, wherein the proxy has an interface to the

application; and the first customization module has a first interface to the proxy, and a second

- 1 27. The computer system of claim 9, wherein the first non-functional property
- 2 comprises error handling and the second non-functional property comprises performance
- 3 measurement.
- 1 28. The computer system of claim 9, wherein the first non-functional property
- 2 comprises failure masking.

## **EVIDENCE APPENDIX**

None.

# RELATED PROCEEDINGS APPENDIX

None.